## § 178.3300

Substances	Limitations
2,3,4,5-Tetrachloro-6-cyanobenzoic acid, methyl ester reaction products with <i>p</i> -phenyllenediamine and sodium methoxide (CAS reg. No. 106276–80–6) .	For use only at levels not to exceed 1 percent by weight of polymers. The finished articles are to contact food only under conditins of use B through H, described in table 2, of § 176.170(c) of this chapter.
4,5,6,7-Tetrachloro-2-[2-(4,5,6,7-tetrachloro-2,3-dihydro-1,3-dioxo-1H-inden-2-yl)-8-quinolinyl]-1H-isoindole-1,3(2H)-dione (C. I. Pigment Yellow 138, CAS Reg. No.30125–47–4) .	For use only at levels not to exceed 1 percent by weight of polymers. The finished articles are to contact food only under conditions of use C through H, as described in table 2 of §176.170(c) of this chapter; provided further that the finished articles shall not be filled at temperatures exceeding 158 °F (70 °C).
2,2'-(2,5-Thiophenediyl)-bis(5- <i>tert</i> -butylbenzoxazole) (CAS Reg. No. 7128–64–5) .	For use as an optical brightener:  1. In all polymers at levels not to exceed 0.015 percent by weight of the polymer. The finished articles are to contact food only under conditions of use A through H described in table 2 of § 176.170(c) of this chapter.  2. In all polymers at levels not to exceed 0.05 percent by weight of the polymer. The finished articles shall contact foods only of the types identified in table 1 of § 176.170(c) of this chapter, under Categories I, II, IV-B, VI-A, VI-B, VI-C, VII-B, and VIII under conditions of use A through H described in table 2 of § 176.170(c) of this chapter.  3. In adhesives complying with § 175.105 of this chapter and in pressure-sensitive adhesives complying with § 175.125 of this chapter.
Titanium dioxide .	this chapter.
Titanium dioxide-barium sulfate .	
Titanium dioxide-magnesium silicate .  Ultramarines	As identified in § 73.2725 of this chapter.
Zinc carbonate	For use only:
	In resinous and polymeric coatings complying with §175.300 of this chapter.
	Melamineformaldehyde resins in molded articles complying
	with §177.1460 of this chapter.
	<ol> <li>Xylene-formaldehyde resins condensed with 4-4'- isopropylidene diphenol-epichlorohydrin epoxy resins com- plying with § 175.380 of this chapter.</li> </ol>
	4. Ethylene-vinyl acetate copolymers complying with § 177.1350 of this chapter.
	5. Urea-formaldehyde resins in molded articles complying with
Zinc chromate	§ 177.1900 of this chapter.  For use only in rubber articles for repeated use complying with
	§ 177.2600 of this chapter; total use is not to exceed 10 percent by weight of rubber article.
Zinc oxide	For use only:
	1. In resinous and polymeric coatings complying with § 175.300 of this chapter.
	2. Melamine-formaldehyde resins in molded articles complying
	with § 177.1460 of this chapter.  3. Xylene-formaldehyde resins condensed with 4-4'-
	<ol> <li>Xylene-formaldehyde resins condensed with 4-4'- isopropylidene-diphenol-epichlorohydrin epoxy resins com- plying with § 175.380 of this chapter.</li> </ol>
	Ethylene-vinyl acetate copolymers complying with § 177.1350 of this chapter.
	5. Urea-formaldehyde resins in molded articles complying with §177.1900 of this chapter.
	For use at levels not to exceed 10 percent by weight.

[48 FR 46775, Oct. 14, 1983]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §178.3297, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

## § 178.3300 Corrosion inhibitors used for steel or tinplate.

Corrosion inhibitors may be safely used for steel or tinplate intended for

use in, or to be fabricated as, food containers or food-processing or handling equipment, subject to the provisions of this section.

- (a) The corrosion inhibitors are prepared from substances identified in this section and used subject to the limitations prescribed.
- (b) The following corrosion inhibitors or adjuvants are used in amounts not to exceed those reasonably required to

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accomplish the intended physical or technical effect:

(1) Corrosion inhibitors (active ingredients) used in packaging materials for the packaging of steel or tinplate or articles fabricated therefrom:

List of substances	Limitations
Dicyclohexylamine and its salts of fatty acids derived from animal or vegetable oil . Dicyclohexylamine nitrite . Morpholine and its salts of fatty acids derived from animal or vegetable oils .	

(2) Adjuvants employed in the application and use of corrosion inhibitors:

List of substances	Limitations
Propylene glycol .	

## § 178.3400 Emulsifiers and/or surfaceactive agents.

The substances listed in paragraph (c) of this section may be safely used as

emulsifiers and/or surface-active agents in the manufacture of articles or components of articles intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food, subject to the provisions of this section.

- (a) The quantity used shall not exceed the amount reasonably required to accomplish the intended technical effect; and the quantity that may become a component of food as a result of such use shall not be intended to, nor in fact, accomplish any physical or technical effect in the food itself.
- (b) The use as an emulsifier and/or surface-active agent in any substance or article that is the subject of a regulation in parts 174, 175, 176, 177, 178 and \$179.45 of this chapter conforms with any specifications and limitations prescribed by such regulation for the finished form of the substance or article.

  (c) List of substances:
  - Limitations

List of substances α-Alkvlα-alkenvland α-alkvlarvl-omegahydroxypoly(oxyethylene) mixture consisting of 30 weight pct α-(2,4,6-triisobutylphenyl)-omegahydroxypoly(oxyethylene) having average poly(oxyethylene) content of 7 moles and 70 weight pct of a weight ratio mixture of  $\alpha$ -(Z)-9-octadecenyl-omega-roxypoly(oxyethylene) having an average hvdroxvpolv(oxvethvlene) average poly(oxyethylene) content of 18 moles and  $\alpha$ -alkyl( $C_{16}$ - $C_{18}$ )omega-hydroxypoly(oxyethylene) having poly(oxyethylene) content of 18 moles.

n-Alkylbenzenesulfonic acid (alkyl group consisting of not less than 95 percent  $C_{10}$  to  $C_{16}$ ) and its ammonium, calcium, magnesium, potassium, and sodium salts .

Alkyl mono- and disulfonic acids, sodium salts (produced from  $\emph{n}$ -alkanes in the range of  $C_{10}$ – $C_{18}$  with not less than 50 percent  $C_{14}$ – $C_{16}$ ).

For use only at levels not to exceed 0.5 pct by weight of coatings complying with §175.320 of this chapter and limited to use as an emulsifier for polyhydric alcohol diesters used as provided in §178.3770(b). The weight of the finished coating shall not exceed 2 milligrams per square inch of food-contact surface.

For use only as emulsifiers and/or surface active agents as components of nonfood articles complying with §§ 175.300, 175.320, 175.385, 175.380, 176.170, 176.180, 177.1010, 177.1200, 177.1210, 177.1630, 177.2600, and 177.2800 of this chapter and § 178.3120.

For use only:

As provided in § 176.170 of this chapter.

- At levels not to exceed 2 percent by weight of polyvinyl chloride and/or vinyl chloride copolymers complying with § 177.1980 of this chapter.
- § 177.1980 of this chapter.

  3. As emulsifiers in vinylidene chloride copolymer or homopolymer coatings at levels not to exceed a total of 2.6 percent by weight of coating solids. The finished polymer contacts food only of the Types I, II, III, IV, V, VIA, VIB, VII, VIII, and IX as identified in table 1 of § 176.170(c) of this chapter, and limited to conditions of use E, F, and G described in table 2 of § 176.170 of this chapter.
- 4. As emulsifiers and/or surface-active agents at levels not to exceed 3.0 percent by weight of polystyrene or rubber-modified polystyrene complying with § 177.1640(c) of this chapter under conditions of use B through H described in table 2 of § 176.170(c) of this chapter.

 $<sup>\</sup>alpha\text{-Alkyl-}\textit{omega-}\text{hydroxypoly(oxyethylene)}$  produced by condensation of 1 mole of  $C_{11}.C_{15}$  straight-chain randomly substitued secondary alcohols with an average of 7–20 moles of ethylene oxide .